

CITY OF SAN DIEGO, CALIFORNIA
COUNCIL POLICY

SUBJECT: DEVELOPMENT WITHIN AREAS OF SPECIAL FLOOD HAZARD
POLICY NO.: 600-14
EFFECTIVE DATE: December 2, 1997

BACKGROUND:

Development within areas of special flood hazard is unwise from a health, safety and general welfare standpoint. If property in a floodplain is elevated to avoid inundation the resulting effect is an increase in the water surface elevation in other areas of the floodplain. In the absence of FEMA regulations, the accumulated effect of development can increase the potential damage to other existing or proposed developments.

The National Flood Insurance Act of 1968 established the Federal Flood Insurance Program which provides subsidized flood insurance for all property owners providing that the local government institutes adequate land use and development control measures for preventing and reducing property damage from flooding. The City of San Diego, by Council Resolution, indicated its desire to qualify for the Federal Flood Insurance Program and, in 1973, adopted appropriate floodplain regulatory zoning consisting of the Floodway (FW) and Floodplain Fringe (FPF) zones.

PURPOSE & INTENT:

To promote the public health, safety and general welfare, and to minimize public and private losses due to flooding and flood conditions in specific areas by provisions designed to:

- a. Protect human life and health;
- b. Provide Environmental Protection consistent with related City requirements;
- c. Minimize expenditure of public funds for flood control projects;
- d. Minimize the need for rescue and relief efforts associated with flooding;
- e. Minimize prolonged business interruptions;
- f. Minimize damage to public facilities and utilities located in areas of special flood hazard.

POLICY:

It is the Council's policy to prohibit development within areas of special flood hazard prior to either completion of flood control works with a capacity to contain the 100-year flood peak flow, the application of appropriate floodplain regulatory zoning or it can be shown that a proposed development or structure complies with the provisions for flood hazard reduction listed herein. This policy shall apply to all areas of special flood hazard within the City of San Diego.

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BASIS FOR ESTABLISHING AREAS OF SPECIAL FLOOD HAZARD

[Moved to Land Development Code Section 143.0145 (Development Regulations for Floodplains),
first paragraph.]

~~The area of applicability of this policy is that identified as areas of special flood hazard in a report entitled "Flood Insurance Study, City of San Diego, California" dated June 19, 1997, published by the Federal Emergency Management Agency (FEMA), and accompanying Flood Insurance Rate Maps dated June 19, 1997, and all subsequent amendments and/or revisions. This Flood Insurance Study and attendant mapping is the minimum area of applicability of this policy, and may be supplemented by studies for other areas which are recommended to the City of San Diego by FEMA or the Federal Insurance Administration. No structure or land development shall be constructed, located, extended, converted or altered without full compliance with the terms of this policy and other applicable regulations.~~

ADDITIONAL CONDITIONS

~~Development proposals will be further conditioned upon the following:-~~

- ~~1. — Appropriate agreements between the developer and City to assure participation by the developer or his successor in interest in financing of future flood control works. [Moved to Section 143.0145(c)(1)(E).]~~
- ~~2. — The developer shall grant to City a flowage easement for that portion of the property within a designated floodway. [Moved to Section 143.0145(c)(1)(D).]~~
- ~~3. — The final map shall bear the notation "Subject to Inundation" for those portions of the property with a grade lower than the peak elevation of the 100-year flood. — [Moved to Section 143.0145(c)(2)(F).]~~

DEFINITIONS — [Moved to Section 113.0103 (Definitions).]

~~For the purpose of this policy, the following definitions shall apply:-~~

~~"Appeal" means a request for a review of the Floodplain Administrator's interpretation of any provision of this policy or a request for a variance.~~

~~"Area of shallow flooding" means a designated AO or AH zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet, a clearly defined channel does not exist and the path of flooding is unpredictable and indeterminate.~~

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~~"Base flood" means the flood having a one percent chance of being equalled or exceeded in any given year (also called the "100-year flood").~~

~~"Basement" means any area of the building having its floor subgrade (below ground level) on all sides.~~

~~"Breakaway walls" are any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic or any other suitable building material which is not part of the structural support of the building and which is designed to break away under abnormally high tides or wave action without causing any damage to the structural integrity of the building on which they are used or any buildings to which they might be carried by flood waters. A breakaway wall shall have a safe design loading resistance of not less than ten and no more than twenty pounds per square foot. Use of breakaway walls must be certified by a registered engineer or architect and shall meet the following conditions:~~

- ~~1. Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and~~
- ~~2. The elevated portion of the building shall not incur any structural damage due to the effects of wind and water loads acting simultaneously in the event of the base flood.~~

~~"Development" means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.~~

~~"Flood or flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from (1) the overflow of flood waters, (2) the unusual and rapid accumulation or runoff of surface waters from any source, and/or (3) the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in this definition.~~

~~"Flood Boundary and Floodway Map" means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of flood hazard and the floodway.~~

~~"Flood Insurance Rate Map (FIRM)" means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.~~

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~~"Flood Insurance Study" means the official report provided by the Federal Insurance Administration that includes flood profiles, the FIRM, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood.~~

~~"Floodplain or flood-prone area" means any land area susceptible to being inundated by water from any source (see definition of "flooding").~~

~~"Floodplain Management" means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.~~

~~"Floodplain management regulations" means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances and other applications of police power. The term describes such state or local regulations in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.~~

~~"Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.~~

~~"Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. Also referred to as "regulatory floodway".~~

~~"Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long term storage or related manufacturing facilities.~~

~~"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.~~

~~"Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this policy.~~

~~"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also~~

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~~includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days.—~~

~~"Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for sale or rent.—~~

~~"Mean sea level" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.—~~

~~"New construction" means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by this community.—~~

~~"One hundred year flood" or "100-year flood" means a flood which has a one percent annual probability of being equalled or exceeded. It is identical to the "base flood", which will be the term used throughout this policy.—~~

~~"Person" means an individual or his agent, firm, partnership, association or corporation, or agent of the aforementioned groups, or this state or its agencies or political subdivisions.—~~

~~"Remedy a violation" means to bring the structure or other development into compliance with State or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.—~~

~~"Riverine" means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.—~~

~~"Special flood hazard area (SFHA)" means an area having special flood hazards, and shown on an FHBM or FIRM as Zone A, AO, A1-30, A99 or AH.—~~

~~"Start of Construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets~~

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~~and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.—~~

~~"Structure" means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.—~~

~~"Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:~~

~~(1) — before the improvement or repair started; or~~

~~(2) — if the structure has been damaged, and is being restored, before the damage occurred.~~

~~For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either:~~

~~(1) — any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or~~

~~(2) — any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.—~~

~~"Variance" means a grant of relief from the requirements of this policy which permits construction in a manner that would otherwise be prohibited by this policy.—~~

~~"Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.—~~

DESIGNATION OF FLOODPLAIN ADMINISTRATOR:

The City Engineer is hereby designated to administer and implement this policy and applicable floodplain regulations by granting or denying development approval in accordance with its provisions the Land Development Code. [Also addressed in Section 143.0145 (Development Regulations for Floodplains), second paragraph.]

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DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR:

The Duties and responsibilities of the floodplain administrator shall include reviewing development to ensure that:

~~1) Development and permit review to insure that:~~

- a. all proposed land development and building plans meet the requirements of this policy;
- b. all other necessary State and Federal permits have been obtained; and
- c. all other necessary City permits and environmental review have been obtained;

~~d. a proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For the purpose of this policy, "adversely affect" shall mean that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood elevation by more than one foot at any point. [Moved to Section 143.0145(c)(1)(B).]~~

~~2) Obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source when base flood elevation data has not been provided by the Federal Emergency Management Agency's Flood Insurance Study for the City of San Diego; [Moved to Section 143.0145(c)(1)(A).]~~

~~3) Notify affected adjacent communities and the California Department of Water Resources of any proposed alteration or relocation of a watercourse and submit evidence of such notification to the Federal Insurance Administrator; [Moved to Section 143.0145(c)(1)(C)(i).]~~

~~4) Review of any proposal to alter or relocate a watercourse to insure that the flood carrying capacity of the altered or relocated portion of said watercourse is maintained; [Moved to Section 143.0145(c)(1)(C)(ii).]~~

~~5) Obtain and maintain for public inspection and make available as needed the certifications required in this policy; [Moved to Section 143.0145(c)(1)(C)(iii).]~~

~~6) Make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazard. [Moved to Section 143.0145(c)(1)(A).]~~

DEVELOPMENT APPROVAL: [Moved to Section 143.0145(c)(1) (Development and Permit

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Review) and Section 143.0112 (Requirement to Submit Required Documentation and Obtain Permit Prior to Development on Environmentally Sensitive Lands).]

~~Approval of the floodplain administrator shall be obtained before construction or development begins within any area of special flood hazard. The applicant for development or construction approval may be required to submit the following information for review by the floodplain administrator:-~~

- ~~1. Hydrologic and/or hydraulic studies of the watercourse; description of the extent to which any watercourse will be altered or relocated as a result of the proposed development; plans drawn to scale showing the nature, location, dimensions, and elevations of the development; the location of existing and proposed structures, excavation, embankment and drainage facilities.-~~
- ~~2. Applicable documents related to Environmental Review and other required permits for the site.-~~

~~In addition, the following information must be submitted.-~~

- ~~1. The proposed elevation in relation to Mean Sea Level of the lowest floor (including basement) of all structures, including, in Zone AO, the elevation of the highest adjacent grade.-~~
- ~~2. Proposed elevation in relation to Mean Sea Level to which any structure will be floodproofed, if applicable.-~~
- ~~3. All appropriate certifications listed in this policy.-~~

~~PROVISIONS FOR FLOOD HAZARD REDUCTION~~

~~STANDARDS OF CONSTRUCTION~~.[Moved to Section 143.0145(c)(3) (Standards of Construction).]

~~In all areas of special flood hazards the following standards are required:~~

~~Anchoring~~

- ~~1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.-~~

~~Construction Materials and Methods~~

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- ~~1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.~~
- ~~2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.~~
- ~~3. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.~~
- ~~4. Require within Zone AH or AO adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.~~

Elevation and Floodproofing

- ~~1. New construction and substantial improvement of any structure shall have the lowest floor, including basement, elevated at least two feet above the base flood elevation. Upon the completion of the structure the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor to be properly elevated. Such certification shall be provided to the Floodplain Administrator.~~
- ~~2. New construction and substantial improvement of any structure in Zone AH or AO shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM, or at least two feet if no depth number is specified. Upon the completion of the structure the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, to be properly elevated. Such certification shall be provided to the Floodplain Administrator.~~
- ~~3. Nonresidential construction shall either be elevated in conformance with Nos. 1 or 2 above or together with attendant utility and sanitary facilities:
 - ~~a. be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;~~
 - ~~b. have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and~~
 - ~~c. be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Floodplain Administrator.~~~~

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4. ~~Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:~~
- ~~a. Either a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters; or~~
 - ~~b. Be certified to comply with a floodproofing standard approved by the Federal Insurance Administration.~~

~~STANDARDS FOR UTILITIES:~~ [Moved to Section 143.0145(c)(5) (Standards for Utilities).]

- ~~A. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from systems into flood waters.~~
- ~~B. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.~~

~~STANDARDS FOR SUBDIVISIONS:~~ [Moved to Section 143.0145(c)(2) (Standards for Subdivisions).]

- ~~A. All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood.~~
- ~~B. All final subdivision plans will provide the elevation of proposed structures and pads. If the site is filled above the base flood, the final pad elevation shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.~~
- ~~C. All subdivision proposals shall be consistent with the need to minimize flood damage.~~
- ~~D. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.~~
- ~~E. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.~~

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~~STANDARDS FOR MANUFACTURED HOMES.~~ All new and replacement manufactured homes and additions to manufactured homes shall: [Moved to Section 143.0145(c)(4) (Standards for Manufactured Homes).]

A. ~~Be elevated so that the lowest floor is at least two feet above the base flood elevation; and~~

B. ~~Be securely anchored to a permanent foundation system to resist flotation, collapse or lateral movement.~~

~~FLOODWAYS.~~ Located within areas of special flood hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, this policy prohibits encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. [Moved to Section 143.0145(a) (Floodways).]

VARIANCE PROCEDURE DEVIATIONS

APPEAL BOARD:

- A. Appeals and requests for ~~variances~~ deviations from the requirements of this policy shall be processed consistent with the requirements of the Land Development Code Ordinance.
- B. An appeal shall be heard when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this policy.
- C. In passing upon such applications, the appeals body shall consider all technical evaluations, all relevant factors, standards specified in other sections of this policy, and:
1. the danger that materials may be swept onto other lands to the injury of others;
 2. the danger of life and property due to flooding or erosion damage;
 3. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. the importance of the services provided by the proposed facility to the community;
 5. the necessity to the facility of a waterfront location, where applicable;

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6. the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 7. the compatibility of the proposed use with existing and anticipated development;
 8. the relationship of the proposed use to the comprehensive plan and floodplain management program for the area;
 9. the safety of access to the property in time of flood for ordinary and emergency vehicles;
 10. the expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and,
 11. the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water system, and streets and bridges.
- D. Generally, ~~variances~~ deviations may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items in Paragraph C have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the ~~variance~~ deviation increases.
- E. Upon consideration of the factors of Paragraph C and the purposes of this policy, the City Council may attach such conditions to the granting of ~~variances~~ deviations as it deems necessary to further the purposes of this policy.
- F. The Floodplain Administrator shall maintain the records of all appeal actions and report any ~~variances~~ deviations to the Federal Insurance Administration upon request.

CONDITIONS FOR DEVIATIONS ~~VARIANCES~~:

- A. ~~Variances~~ Deviations may be issued for the reconstruction, rehabilitation or restoration of structures listed in the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.
- B. ~~Variances~~ Deviations shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- C. ~~Variances~~ Deviations shall only be issued upon a determination that the ~~variance~~ deviation is the minimum necessary, considering the flood hazard, to afford relief.

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- D. ~~Variances~~ Deviations shall only be issued upon:
1. a showing of good and sufficient cause;
 2. determination that failure to grant the ~~variance~~ deviation would result in exceptional hardship to the applicant; and
 3. a determination that the granting of a ~~variance~~ deviation will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- E. ~~Variances~~ Deviations may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the provisions of Paragraphs A through D are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- F. Any applicant to whom a ~~variance~~ deviation is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the regulatory flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. ~~A copy of the notice shall be recorded in the office of the County Recorder.~~

HISTORY:

Adopted by Resolution R-203632 09/02/71
Amended by Resolution R-212811 03/13/75
Reaffirmed by Council R-214421 10/08/75
Amended by Resolution R-272880 02/14/89
Amended by Resolution R-289515 12/02/97
Amended by Resolution R-xxxxxx x/x/00